SURFACE SCATTERING OF CHARGE CARRIERS AND SURFACE ELECTRONIC STATES

S. Sologub¹, I. Bordenjuk¹, C. Tegenkamp², H. Pfnür²

¹Institute of Physics, Nat. Acad. of Sci. of Ukraine (46, Nauky Ave., Kyiv 03680, Ukraine; e-mail: sologub@iop.kiev.ua),
²Institut für Festkörperphysik, Leibniz Universität Hannover (2, Appelstraße, Hannover 30167, Germany)

S u m m a r y

Experimental researches of the charge carrier scattering at Mo(110) and W(110) surfaces atomically clean or covered with a hydrogen (deuterium) monolayer with the participation of surface electronic states are considered. In addition, the scattering mechanisms of charge carriers in spin-polarized surface electronic states in Bi(111) epitaxial nanofilms with the atomically clean surface or the surface covered with magnetic and nonmagnetic adatoms to low coverages are discussed.